Relationship Between Workers' Knowledge And Attitudes With The Risk Of Work Accidents At 31 Rice Mill Centers In Kaway XVI Sub- District, West Aceh District.

by Hanifa Maher Denny

Relationship Between Workers' Knowledge And Attitudes With The Risk Of Work Accidents At 31 Rice Mill Centers In Kaway XVI Sub-District, West Aceh District.

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Abstract

Risk is the probability that something occurs and has an impact on the goal. Risk is measured according to its likelihood and consequences of injury and illness as well as the severity of the damage or loss/injury. This study aims to analyze the factors of workers' knowledge and attitudes towards the risk of work accidents in the informal sector. This study used a case-control method by comparing groups of workers who have experienced work accidents with those who have not experienced work accidents. The results showed that there was a relationship between occupational health and safety knowledge factors and the risk of work accidents in 31 rice milling centers with a p-value of 0.000 <0.05 and there was a relationship between workers' attitudes towards the risk of work accidents in 31 rice milling centers with a p-value of 000 <0.05. It suggests the need for socialization, education and information about risk factors of work accidents in 31 rice milling centers.
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Keywords: Knowledge, Workers' Attitude and Work Accident

Introduction

Industrial development continuously grows along with the advanced development of science and technology in Indonesia which then can improve the welfare of people. (Octavariny et al., 2017). The current technological development supports the development of the industrial process in various sectors through the application of suitable technology to media or materials used. The development of this industry affects the workforce. To reduce the risk of work accidents, it is necessary to implement occupational health and safety. (Tika & Widya, 2019).
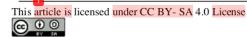
The cause of the risk of work accidents can be in the worker's knowledge of occupational health and safety (OHS) as knowledge is one of the important factors in motivating someone to act. A person's actions based on knowledge will be more durable than those without knowledge(Salsabila et al., 2020).

Based on the data of the International Labor Organization (ILO) in 2013, workers in the world die every second due to work accidents. On April 26, 2013, in the context of World Occupational Health and Safety Day, it was reported that the number of cases of occupational diseases is estimated to reach 160 million cases annually with about 2.02 million deaths. A population study conducted by the ILO in 2005 estimated the deaths were caused by cancer (8%), cardiovascular and cerebrovascular diseases (7.5%), chronic respiratory diseases (10%), and work-related pneumoconiosis (100%)(Stevanus, 2016).

The Workers Social Security Agency (BPJS Ketenagakerjaan) reported an increase to 108,573 work accident cases in 2020 from 77,295 cases in 2019. (Aswar et al., 2016).

Work accidents in 31 rice mill centers in Kaway XVI Sub-district increased each with 40 cases in 2018, 45 cases in 2019, and 58 cases in 2020. Therefore, this study aims to identify the relationship between workers' knowledge and attitudes with the risk of work accidents at 31 rice mill centers in Kaway XVI Sub-district, West Aceh District.

Methods

This study used an analytical observational method with a case-control design. Analytical observation is a study that looks for the relationship between one variable and another. In an analytical study, it is necessary to formulate a hypothesis before starting the study. The case-control design involves how risk factors are studied using a retrospective approach. This design can be used to assess how big the role of risk factors on disease incidence (causal relationship). (BMJ, 2020).

If the score of questions about knowledge and work attitudes is less than 5, then the worker's knowledge and work attitudes are considered low and vice versa.

Results

Table 1. The relationship between knowledge and Attitudes and incidences of work accidents

Variable	Case		Control		P-value	OR
	F	%	F	%		
Knowledge						
Poor	54	93,1	3	2,6	0,000	508,
Good	4	6,9	113	97,4		500
Attitude						
Poor	57	98,3	1	0,7		
Good	1	1,7	115	99,1	0,000	655
Total	**58**	**100**	**116**	**100**		

The results of the study prove that there is a significant relationship between occupational health and safety knowledge and work accidents. The proportion of respondents who had poor knowledge of occupational health and safety in the case group was 93.1% compared to the control group of 2.6% with a p-value of 0.000, OR = 508.500. It indicates that workers with poor OHS knowledge have a 508.5 times greater risk of having a work accident than those with good OHH knowledge.

The results of the study prove that there is a significant relationship between occupational health and safety knowledge and work accidents. The proportion of respondents who had poor work attitudes in the case group was 98.3% compared to the control group of 0.7% with a p-value of 0.000, OR = 665. It

indicates that workers with poor work attitudes have a 665 times greater risk of having a work accident than those with a good work attitude

Discussion

The relationship between knowledge and the risk of work accidents

The results of the OHS study concerning work accidents in 31 rice mill centers in Kaway XVI Sub-district, West Aceh District showed that OHS knowledge had a significant relationship with the incidence of work accidents (P-value = 0.001; OR = 1.70) which is in line with a study by Kalalo (2016) in a group of fishermen in Belang Village, Minahasa district. It indicates that workers who have OHS knowledge are less likely to experience work accidents by 1.70 times than those with poor OHS knowledge.(stevanus, 2016)

OHS knowledge is information that can make a worker aware that each workplace can have both minor and serious hazards, including the risk of work accidents that can be caused by unsafe actions (80%) and the rest is due to unsafe environmental conditions. Generally, these unsafe actions are caused by a lack of knowledge about occupational health and safety, skills, and hazardous actions(Salsabila et al., 2020).

Workers who have high knowledge can see the dangers that can occur in the workplace, and be aware of the risks that exist in the workplace so that work accidents can be avoided. Workers with high knowledge tend to try to avoid work minor work accidents because they realize that minor accidents will result in more serious work accidents. If industrial workers have high knowledge, then they will take safe actions and try to avoid work accidents. On the other hand, workers who have low knowledge will face the danger of not knowing what to expect.(Li et al., 2021)

The relationship between knowledge and the risk of work accidents

The results of the study on work attitudes towards the incidence of work accidents in 31 rice mill centers in the Kawai XVI sub-district, West Aceh District showed that attitude had no significant relationship with the incidence of work accidents (P-value = 1.0, or > 0.05). It is in line with a previous study conducted by Ariyanto (2016) on the E&P Indonesia workers. It

indicates that workers with a poor attitude have a significant relationship with the incidence of work accidents..(Aryanto et al., 2016)

Attitude is the worker's reaction who are still closed to a stimulus or object. Workers' attitudes towards workplace conditions, workplace accidents, and unsafe measures are important (Sirait, 2021). Previous workers' attitudes can be influenced by their experience in working, important co-workers, work safety culture, and information media. To reduce work accidents, companies need to present some ideal workers as the model that can be imitated by others.(Ahyanuriza et al., 2020)

Workers' attitude towards safety is important in everyday life, especially in the work environment. A person's attitude towards occupational health and safety in a company can be influenced by various factors including field conditions or work environment and situation. If workers are in a work environment with less pressure and obstacles, attitude expressions can be formed and actual attitudes, both positive and negative, can be seen in workers in oil drilling companies. The worker's attitude towards work safety can be identified cognitively, affectively, and conatively to see a person's basic tendency to react consistently and consciously in avoiding and anticipating work accidents(Iqbal et al., 2020)

Conclusion

Education, socialization, and information regarding risk factors of work accidents in the 31 rice milling industries are needed. Further, it is important to establish UKK posts at puskesmas in Kaway XVI District so that workers in the informal sector can be properly recorded.

Acknowledgment

Authors Contribution

This research was completed with teamwork. The first author contributes as a drafter, data curation, data analysis, methodology, supervision. The second, third, and fourth authors contributed to the data analysis methodology. The fifth author contributes as a data curator, supervision. All writers play a role in visualizing, writing, and drafting.

Reference

Ahyanuriza, M., Fauzan, A., Rizal, A., Masyarakat, K., Masyarakat, F. K., Kalimantan, U. I., Arsyad, M., Banjari, A., Masyarakat, K., Islam, U., Muhammad, K., Al, A., Masyarakat, K., Islam, U., Muhammad, K., &Al, A. (2020). Kecelakaan Kerja Pada Petugas Penanganan Limbah Meids Di Rumah Sakit Ulin Banjarmasin Tahun 2020. 1–7.

Aryanto, L., Ekawati, & Kurniawan, B. (2016). Hubungan Pelatihan , Status Kerja , Latar Kerja Pada Total E & P Indonesie. Jurnal Kesehatan Masyarakat, 4(2356–3346), 457–467.

Aswar, E., Asfian, P., & Fachlevy, A. (2016). Faktor-Faktor Yang Berhubungan Dengan Kecelakaan Kerja Pada Pekerja Bengkel Mobil Kota Kendari Tahun 2016. Jurnal Ilmiah Mahasiswa Kesehatan Masyarakat Unsyiah, 1(3), 185957.

BMJ. (2020). Case-Control and Cross-sectional Study. https://www.bmj.com/about-bmj/resources-readers/publications/epidemiology-uninitiated/8-case-control-and-cross-sectional

Handayani, W., Lestari, Y., & Puri, I. Y. (2011). Kecelakaan Kerja Pada Perajin Rotan di Pitameh dan Tanah Sirah Kecamatan Lubuk Begalung Kota Padang. In Jurnal Kesehatan Masyarakat Andalas (Vol. 5, Issue 2, pp. 51–57).

Iqbal, M. I., Issac, O., & Author, C. (2020). Study And Analysis Of Accident Causation Theory For Improving Safety Performance In Oil And Gas. 11(12), 2181–2191. https://doi.org/10.34218/IJARET.11.12.2020.206

Li, X., Zhu, R., Ye, H., Jiang, C., & Benslimane, A. (2021). MetaInjury: Meta-learning framework for reusing the risk knowledge of different construction accidents. Safety Science, 140(May), 105315. https://doi.org/10.1016/j.ssci.2021.105315

Muharani, R., & Dameria, D. (2019). Faktor yang Berhubungan dengan Kejadian Kecelakaan Kerja Pada Pekerja di Bagian Produksi Pabrik Kelapa Sawit Adolina PTPN IV Kabupaten Serdang Bedagai. Jurnal Kesehatan Global, 2(3), 122. https://doi.org/10.33085/jkg.v2i3.4438

Octavariny, R., Siregar, R., & Sartika, W. D. (2017). Hubungan kebisingan dan beban kerja dengan stres kerja pada pekerja bagian kilang padi. 4002,

91–96.

Salsabila, N. nurul, Dihartawan, & Saputra, N. (2020). Analisis hazard identification, risk assesment and risk control (hirarc) pada pekerja informal pabrik dimsum pertok pondok ranji tahun 2020. 9(2), 169–179.

Sirait, R. (2021). Hubungan Pengetahuan dan sikap mengenai keselamatan dan kesehatan kerja dengan kecelakaan kerja pada PT. saripati batang. 3(1), 1–7.

stevanus, yonathan kalalo. (2016). Hubungan Antara Pengetahuan Dan Sikap Tentang K3 Dengan Kejadian Kecelakaan Kerja Pada Kelompok Nelayan di Desa Belang Kecamatan Belang Kabupaten Minahasa Tenggara. Pharmacon, 5(1), 244–251. https://doi.org/10.35799/pha.5.2016.11254

Tika, M., & Widya, C. (2019). Higeia Journal of Public Health. Beban Kerja Terhadap Tingkat Kelelahan Kerja Pada Pekerja Penggiling Padi, 1(3), 625–634.

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